

**ABSTRACT OF THE DISCLOSURE**

A method for detecting an ending point during an etching process in semiconductor fabrication. In general, an implantation technique in combination with chemical analysis of the implants is used for ending point detection. In one aspect, a method for detecting an endpoint of an etch process comprises the steps of implanting a dopant into a material at a reference depth, detecting a concentration of the dopant in an etching environment as the material is etched, and determining that the material has been etched to the reference depth when peak concentration of the dopant is detected.